

**This Page Is Inserted by IFW Operations  
and is not a part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
**Image Problem Mailbox.**

Ref 1

# PATENT ABSTRACTS OF JAPAN

(11) Publication number : 03-260073

(43) Date of publication of application : 20.11.1991

(51)Int.CI.

C23C 16/56

**C23C 16/50**

H01L 21/205

H01L 21/31

(21) Application number : 02-060425

(71)Applicant : FUJI ELECTRIC CO LTD

(22) Date of filing : 12.03.1990

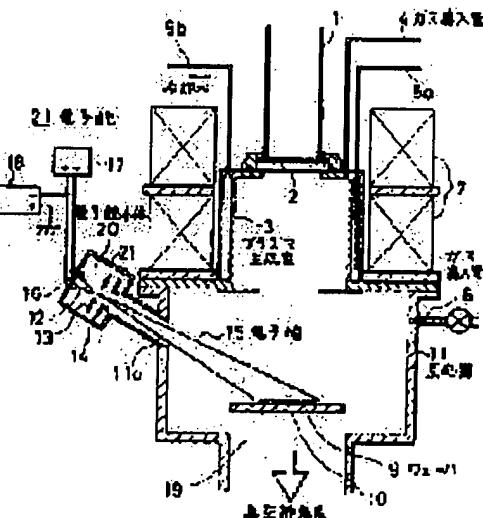
(72) Inventor : ISHIOKA HISAMICHI

#### (54) FORMATION OF THIN FILM

(57) Abstract:

**PURPOSE:** To obtain a dense insulating film having a low hydrogen concn. and satisfactory molecular bond on the surface of a wafer without heating the wafer by irradiating the surface of the wafer with electron beams during or after the formation of a thin film on the surface of the wafer by plasma CVD.

**CONSTITUTION:** An electron gun 21 for emitting electron beams is fitted to an ECR plasma CVD device so that the body 20 of the electron gun 21 is fixed in an opening 11a pierced in the side wall of a reaction chamber 11. When a thin film is formed on the surface of a wafer 9, the surface of the wafer 9 is irradiated with electron beams 15 from the electron gun 21 during or after the formation of the thin film so that electrons are showered on the entire surface of the wafer 9. Since the wafer is not heated, the thin film can be formed at a low temp. without heating an Al circuit having low heat resistance to a high temp.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]